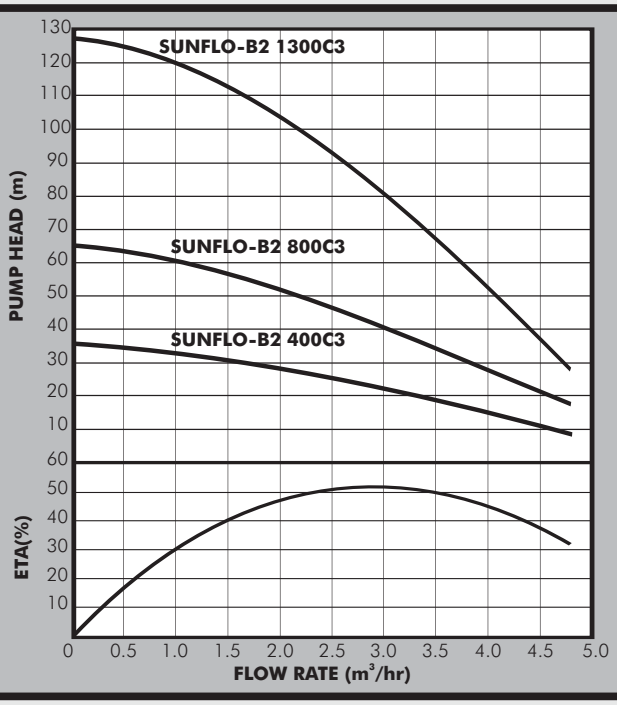
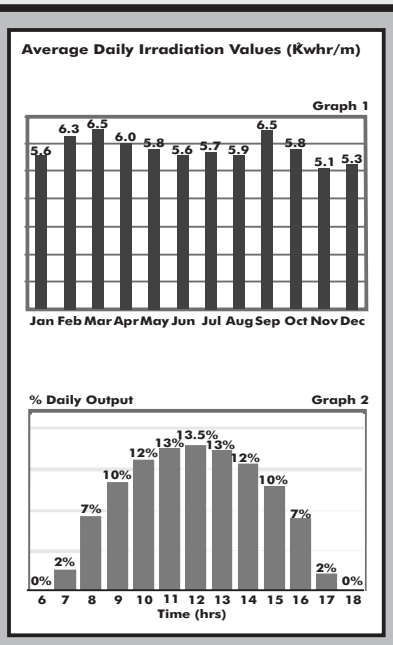
NEW PRODUCT

SUNFLO-B2

DC Solar Submersible Pump





PUMP

DAYLIFF SUNFLO-B2 pumps are specifically designed for PV solar powered water supply from wells and boreholes. They are of centrifugal design and material of construction incude polycarbonate impellers and diffusers, cast iron delivery and suction chambers and AISI 304 stainless steel pump housing, shaft and shaft coupling. Pumps are supplied complete with an MPPT controller.

MOTOR

Permanent magnet, oil filled, brushless, DC motor specifically designed for maximum efficiency from solar module power sources. It should be powered by a solar array configured to provide the input voltage required and sized at approximately 130% of the rated motor power

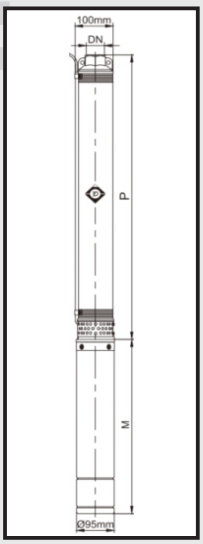
Enclosure Class: IP68 **Insulation Class:** F **Speed:**3000rpm

CONTROLLER

The pump is supplied with a seperate multifunction MPPT (Maximum Power Point Tracking) controller that tracks the solar module's maximum power output voltage which varies with module temperature and irradiation levels. This ensures maximum current output, typically +25% higher than conventional module controllers and a similar increase in daily water output. The controller also protects from over and under voltage, over current and low water level and features various indicator lights that give the pump's operating status. The system can be installed either with or without batteries. If batteries are included, the pump will operate when there is insufficient solar irradiation for direct power.

PUMP OUTPUTS

Pump output curve is given at standard test conditions of 1000W/m solar irradiance and 25°C. Output will vary throughout the year depending upon prevailing irradiation levels. For estimated daily outputs at continuous pumping, multiply the indicated output at the duty point by the daily radiation given in Graph 1. For indicative purposes, factors of 1.1 can be applied for hot arid areas and 0.9 for temperate high-altitude areas in the Tropics. Output will vary throughout the day as a proportion of the estimated hourly irradiation as shown in Graph 2.



OPERATING PARAMETERS

Pumped Liquid: Thin, clean, chemically non-aggressive liquids with a maximum particle size of 2.3mm
Max. Liquid Temperature: +35°C
Max Immersion Depth: 100m

PUMP DATA

Model	Motor Rating (W)	Input Voltage (V)	Peak Voltage (V)	Open Circuit Voltage (VOC)	PV Modules (W)	DN (")	Dimensions (mm)		Weight (kg)
							M	P	
SUNFLO-B2 400C3	400	48	≥40	<75	1x545W	1¼	251	298	15
SUNFLO-B2 800C3	800	72	≥70	<110	2x545W (connected in Series)			347	16
SUNFLO-B2 1300C3	1300	130	≥130	<180	4x545W (2 No. Series, 2No. Parallel Strings)			469	19